Director's Report

National Advisory Council on Minority Health and Health Disparities

February 27, 2018

Eliseo J. Pérez-Stable, M.D.

Director, National Institute on
Minority Health and Health Disparities



HHS and NIH Updates



HHS Appointment: Alex M. Azar II, J.D.

- Sworn in as Secretary of Health and Human Services on January 29, 2018
- Worked in both the public and private sectors, as an attorney and in senior leadership roles focused on advancing healthcare reform, research and innovation
- Former pharmaceutical executive and Deputy Secretary HHS in George W. Bush's administration
- Eric D. Hargan, who served as Acting Secretary, returns to his role as HHS Deputy Secretary



NIH Departure: Roderic Pettigrew, Ph.D., M.D.

- Served as the founding Director, National Institute of Biomedical Imaging and Bioengineering
- Joins Texas A&M University to become CEO of Engineering Health, the nation's first comprehensive educational program to fully integrate engineering into all health-related disciplines
- Serves as executive dean for EnMed, new Houston-based engineering medicine track that will train Texas A&M medical students to invent solutions to challenging medical problems
- NIBIB Deputy Director Jill Heemskerk, Ph.D, serves as acting director during the national search
- NIBIB has \$350 million budget; active search for new director



NIMHD Updates

NIMHD Appointment Anna María Nápoles, Ph.D., M.P.H.

- Scientific Director, Division of Intramural Research, NIMHD started on November 13, 2017
- From University of California, San Francisco where she served as professor in the Division of General Internal Medicine, Department of Medicine
- Leader in developing methods for communityengaged, translational research to improve the health of disparity populations that build community capacity to deliver culturally suitable, evidence-based behavioral interventions



NIMHD Division of Intramural Research Program Population, Social and Behavioral Sciences

Interventions

Late stage (T3 & T4) translation research in minority and other health disparities communities

- Delivered in real-world communities
- Reflects scientific evidence
- Fits the target audience
- Considers the complex social determinants of health disparities
- Builds community capacity to reduce health disparities

Mechanisms

How environmental, social, psychological and economic risk factors produce health disparities

- Life course effects of early childhood exposures
- Genetic susceptibility and modifiable environmental factors
- Effects of health policies on population subgroups
- Psychoneuroimmunology

NIMHD New Hires

- Jung Byun, Ph.D.
 Staff Scientist, Division of Intramural Research
- Starsky Cheng
 Office of Administrative
 Management
- Cen (Julia) Chen
 Pre-Doctoral Fellow,
 Division of Intramural
 Research
- Jeanne Jones
 Office of Administrative
 Management









- Thomas Moehlman
 Office of Science Policy,
 Strategic Planning, Analysis,
 Reporting, and Data
- Michael Ramsey
 Doctoral Student
 Division of Intramural
 Research
- Malaika Staff
 Office of Extramural
 Research Administration
- Matthew Wise
 Office of Administrative
 Management









NIMHD Departure: Bryan Maynard

- NIMHD Budget Officer since 2015 and member of the Leadership Group
- Transitioned February 3 to the Department of Housing and Urban Development with a promotion
- Kenneth Sonnenberg will serve as Acting Budget Officer



Legislative Update

September 2017

- 47th Congressional Black Caucus Foundation Annual Legislative Conference Health and Wellness Luncheon
 - "African American Participation in Clinical Trials: Challenging the Gold Standard"
- Congressional Black Caucus visits NIH with several IC Directors participating





Celebrating the Life and Legacy of U.S. Congressman Louis Stokes

- Thursday, October 12, 2017
- NIMHD and the NIH Office of the Director held a fireside chat in honor of former U.S. Congressman Louis Stokes
- NIH Director, Dr. Francis S. Collins hosted a conversation with the Stokes family in recognition of Stokes' autobiography, "The Gentleman from Ohio"
- Former HHS Secretary Louis W. Sullivan provided remarks

View archive at https://videocast.nih.gov/





Director's Recent Presentations

American Association for Cancer Research

Conference on the Science of Cancer Health Disparities Atlanta, Georgia September 26-27, 2017

Jackson State University

17th Annual Eliminating Health Disparities Conference Jackson, Mississippi October 6, 2017

Harvard Medical School

Equity and Social Justice Health Disparities Advancing the Health Agenda for Disparity Populations Boston, Massachusetts October 25, 2017

Research Centers in Minority Institutions (RCMI)

Translational Science 2017

Scientific Vision on Minority Health and Health Disparities Research, Washington, D.C. October 30, 2017

Upstate Medical University

Dean's Grand Rounds Syracuse, New York November 1, 2017

2017 Academy Health Concordium

Working to Create More Bridges and Achieve Person-Centered Care; Panel moderator, Using Data to Promote Health Equity, Washington, D.C. November 17, 2017

University of Virginia School of Medicine

Medicine Grand Rounds/Martin Luther King Celebration Charlottesville, Virginia January 17, 2018

Advancing the Science of Cancer in Latinos

University of Texas, San Antonio Health Sciences San Antonio, Texas February 21, 2018



Black History Month Observance

Department of Health and Human Services Office of Minority Health February 23, 2018

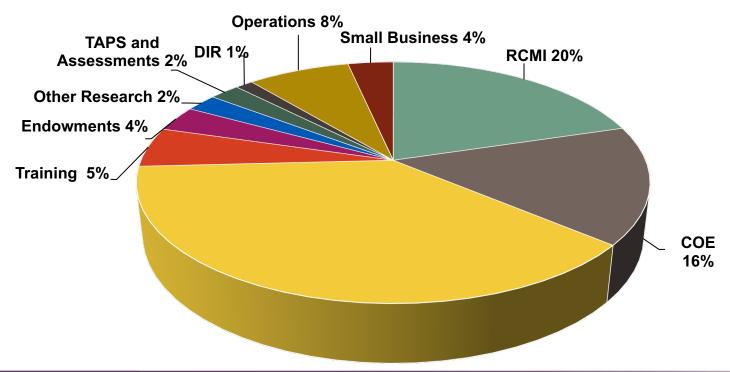




Right Photo (I-r): **Dr. Gary H. Gibbons**, NHLBI Director, **Dr. Matthew Y.C. Lin**, HHS Deputy Asst. Secretary for Minority Health and Director, Office of Minority Health, **Dr. Brett Giroir**, HHS Asst. Secretary for Health, **Alex M. Azar II**, HHS Secretary for Health, **Donna M. Christensen**, Ret. Rep. (D-VI), **VADM Jerome M. Adams**, U.S. Surgeon General, and **Dr. Eliseo J. Pérez-Stable**, NIMHD Director

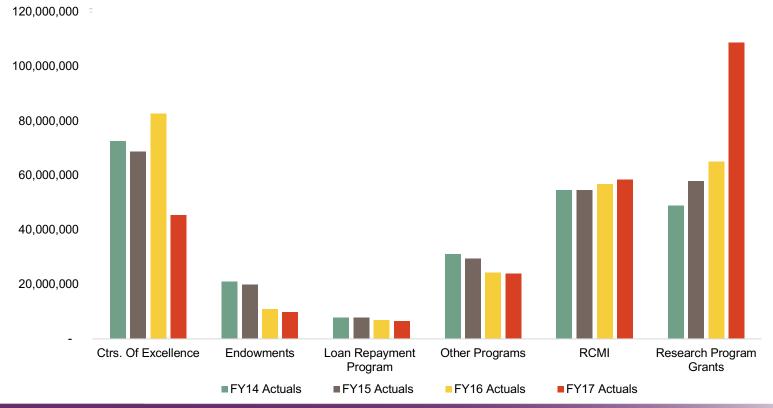


2017 Actual Funding Distribution \$287.7 Million





NIMHD Operational Spending Levels FY2014 – FY2017





NIMHD Program Updates



Investigator Definitions

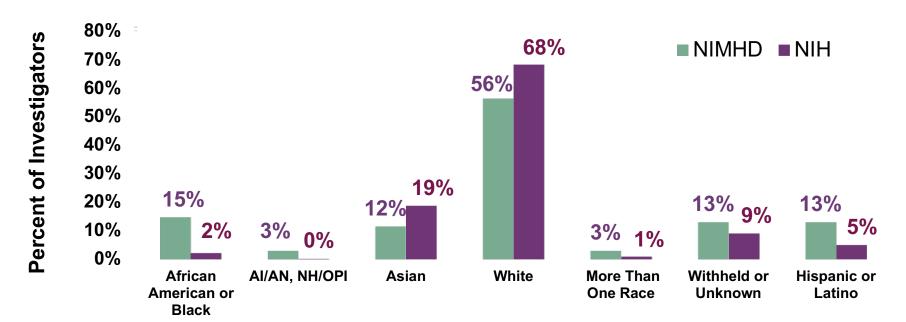
- *Early Stage Investigator:* ≤ 10 years from completing terminal research degree or end of post-graduate training
- New Investigator: Has not previously received substantial, independent funding from NIH (R01)
- Established Investigator: Has received funding for at least one R01 and >10 years since completion of research training

R01Applicant Award Rates FY2016 and FY2017

	Early Stage		New (not ESI)		Established	
	FY16	FY17	FY16	FY17	FY16	FY17
Total	25	63	74	147	65	171
Awarded	6	25	13	41	19	46
Rate	24%	39.7%	17.6%	27.9%	29.2%	26.9%
% Change		15.7%		10.3%		(-2.3%)

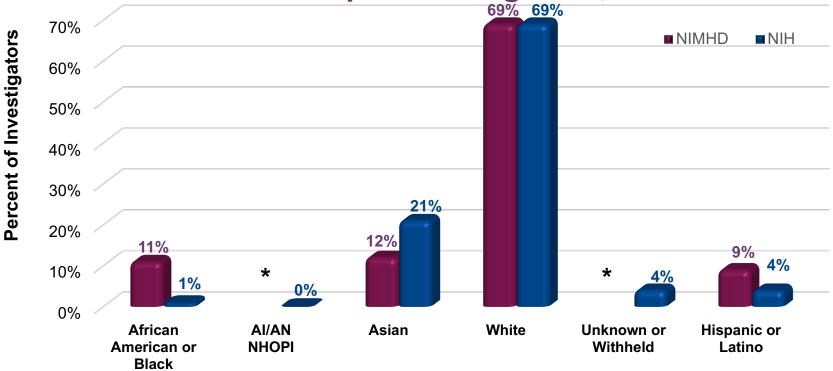


Racial and Ethnic Distribution of NIMHD and NIH Principal Investigators, FY 2017





Race and Ethnic Distribution of NIMHD and NIH R01 Principal Investigators, 2017



*Note: the observations for AI/NA, NHOPI and more than one race were below the threshold for reporting for NIMHD.



Research Career Development Awards (K Programs)

NIMHD supports awards for senior level postdoctoral fellows and established investigators

- K01: Mentored Research Scientist Research
- K08: Mentored Clinical Scientist Research
- K23: Mentored Patient-Oriented Research
- K99/R00: NIH Pathway to Independence Award
- K18: Short-term Mentored Career Enhancement

Awards for Mid-Career Investigator to Integrate Basic Behavioral and Social Sciences



NIMHD Diversity Supplements

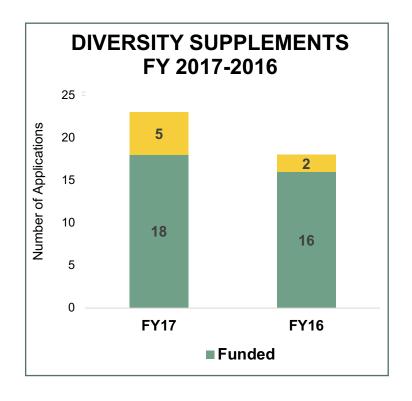
Fiscal year 2016

- Received 18 applications
- Funded 16 (89%) applications

Fiscal year 2017

- Received 23 applications
- Funded 18 (78%) applications

DIVERSITY SUPPLEMENTS BY MECHANISM FUNDED AWARDS					
	R01	U01	U54	G12	P50
2016	7	1	5	1	1
2017	8	5	3	1	1







Categories & Goals

- Scientific Research Categories
 - □ Goal 1: Minority Health Improved
 - □ Goal 2: Etiology of Health Disparities
 - □ Goal 3: Interventions to Reduce Health Disparities
 - □ Goal 4: Measures, Metrics and Tools
- Research-Sustaining Categories
 - Goal 5: Training: Workforce Diversity and Scientific Expertise
 - Goal 6: Capacity Building to Advance Research
 - □ Goal 7: Inclusion of Minorities in Clinical Studies
- Outreach, Collaboration and Dissemination Categories
 - Goal 8: Community Engagement, Dissemination and Implementation
 - Goal 9: Research Community Building



Starting Line:

- Current minority health and health disparities research efforts
- Minority health and health disparities initiatives underway at NIH

Next Steps:

- Minority health and health disparities concepts in development
- Potential initiatives for advancing the science of minority health and health disparities within 5 years

Leap Forward:

- Visionary ideas that may dramatically reshape the science
- Bold, aggressive actions to improve minority health and reduce health disparities



2018 Plans

- Community listening sessions will take place between March – May
 - Held across the country in six geographically diverse locations
 - Two virtual sessions to supplement
- Draft for discussion by July
- NIH clearance process in September



Scientific Advancement Plan



NIMHD Scientific Advancement Plan

Advances in biomedical science, such as the emergence of genomics, precision medicine, population science, big data, and health IT hold greater promise to improve our nation's health

Scientific Advancement Plan

- A transformational research agenda to advance the science of minority health and health disparities
- Champions the fields of minority health and health disparities to contribute to and benefit from biomedical research advances



NIMHD Scientific Advancement Plan

To meet the demands of scientific advances and demographic changes in the population, NIMHD is redefining, reorganizing, and establishing new research programs and activities:

- Strengthen the science in minority health and health disparities
- Increase investigator-initiated research
- Strengthen the evaluation and reporting of minority health and health disparities research
- Support the expansion of workforce diversity





NIMHD Scientific Advancement Plan

- Enhance opportunities for early-stage investigators
- Leverage the NIMHD Health Disparities Research Institute to cultivate the next generation
- Expand research career training awards
- Redefine and strengthen legacy research programs
 - 1. Centers of Excellence
 - 2. Research Centers in Minority Institutions
 - 3. Research Endowment Program





Scientific Advances

Prevalence Obesity Among Youth Ages 2-19, by Education Level of Head of Household, US, 2011-2014

	%Males	%Females
Whites	16.9 / 9.6	22.5 / 7.5
Blacks	21.1 / 14.5	21.0 / 16.3
Latinos	24.4 / 12.9	23.9 / 14.0
Asian	16.9 / 7.9	9.2/ 3.3

Ogden, C.L., et. al., MMWR February, 2018



Disparities Among Non-poor African Americans and Latinos: Role of Discrimination

- National longitudinal survey of youth, parents and children, 1979-2012
- 45% White, 34% Black, 21% Latino
- Acute and chronic discrimination measured
- Increased SES for Whites = less discrimination
- Upwardly mobile or higher SES Blacks and Latinos experienced more discrimination
- May Explain Black-White gap in self-rated health

Colen C.G., et. al., Soc Sci Med, 2017



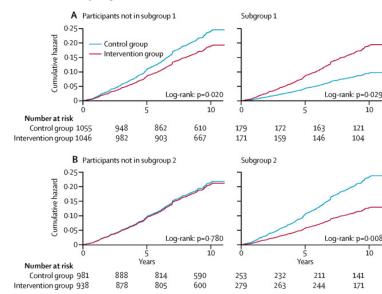


Integrative Biological and Behavioral Sciences

Targeting weight loss interventions to reduce cardiovascular complications of type 2 diabetes

Heterogeneous treatment effects in the Look AHEAD trial

- Intensive weight loss intervention did not reduce cardiovascular events on average
- Subgroup with well-controlled diabetes but poor self-reported general health experienced negative effects negating overall effects
- A short questionnaire on general health might identify people with T2D likely to benefit from the intervention



Baum A., et. al., Lancet Diabetes Endocrinology, 2017

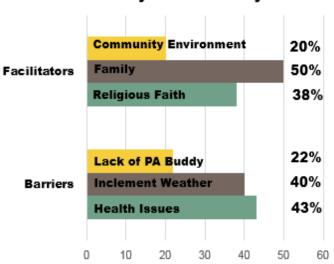


Community Health and Population Sciences

Perspective of older breast cancer survivors towards physical activity

- Although AA (59%) and SES nondisadvantaged (78%) participants reported that race and culture influenced their attitudes toward physical activity, it did not translate to racial and SES differences in preferences
- Preference was for strength training (80%) due to diminished upper body strength after cancer treatment
- Conclusion: Physical activity programs should focus on cancer treatment related concerns and include strength training

Facilitators and Barriers to Physical Activity



Owusu, C., et. al., J Geriatric Oncology, 2018, epub



Genome-Wide Association Study of Heavy Smoking and Daily/Nondaily Smoking in the HCHS/SOL

- Hispanic Community Health Study/Study of Latinos: genetic associations with smoking behavior among 12,741 with smoking data and 5119 ever smokers
- CHRNA5, encodes the α5 cholinergic nicotinic receptor subunit, associated with heavy smoking at genome-wide significance (p ≤ 5Å~10-8)
- Loci on chromosome 2 and 4 achieved genome wide significance for association with non-daily smoking, but replication attempts were limited by small Latino samples

Saccone N.L., et al, Nicotine & Tobacco Research, 2017





Recent Grants and Programs

Integrative Biological and Behavioral Sciences

Social Epigenomics Grants Funded

- Launched in 2017
- 10 R01 awards, ~ \$30 million
 - Nine NIMHD awards
 - One NCI award
- Wide range of research topics
 - Violence exposure
 - Epigenetic changes and asthma risk
 - Social stress and prostate cancer risk
 - DNA methylation and disparities in cardiovascular mortality
 - Epigenomic predictors of PTSD
 - Traumatic stress

NEWS RELEASES

Tuesday, October 31, 2017

NIH establishes new research in social epigenomics to address health disparities

Grant program to break new ground in genomics and health disparities research.

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The National Institutes of Health will award 10 grants to support social epigenomics research in health disparities. This investigatorinitiated research is being funded as part of the Social Epigenomics Research Focused on Minority Health and Health Disparities research program, which seeks to support research to better understand the drivers of health disparities. The National Institute on Minority Health and Health Disparities (NIMHD), part of the National Institutes of Health, will commit \$26.2 million over five years, subject to available funds, for nine awards. An additional award under this initiative will be funded by the National Cancer Institute (NCI) - also part of NIH.



Community Health and Population Sciences

Women's Health

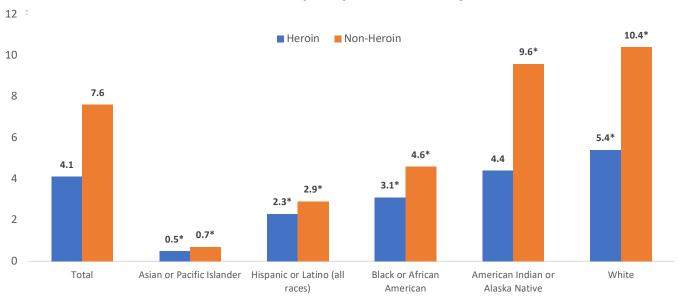
Susan Gennaro, Ph.D. Boston College	R01-MD-012770	Healthy Lifestyle Intervention for High-Risk Minority Pregnant Women: A RCT
Margaret Rosenzweig, Ph.D. University of Pittsburgh	R01-MD-012245	The Symptom Experience, Management and Outcomes According to Race and Social Determinants of Health during Breast Cancer Chemotherapy
Evans Doug, Ph.D. George Washington University	R21-MD-011652	Fit4Mom: Digital Healthy Weight Program for African American Postpartum Women



Clinical and Health Services Research

Opioid Epidemic – Problem

U.S. Heroin and Non-heroin Opioid Death Rates Per 100,000 People by Race/Ethnicity, 2015



Statistically significant difference from total rate at 95% level



Clinical and Health Services Research

Opioid Epidemic – Responses

Current NIMHD investment in opioid research: 10 grants that address opioid/pain management for \$3.1 million

Planned NIMHD investment in research on etiologic factors, healthcare quality, access, treatment and prevention research that impacts minority and health disparity populations

Research Solicitation: Addressing the Challenges Posed by the Opioid Epidemic in Health Disparity Populations

Outreach Activities: Howard University Symposium, November 2017 Tribal Health Board Consultation planned for May 2018



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Questions?